

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-75501; File No. SR-CBOE-2015-050)

July 21, 2015

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Order Granting Approval of Proposed Rule Change to Expire CBOE Volatility Index Options Every Week

I. Introduction

On June 1, 2015, Chicago Board Options Exchange, Incorporated (“Exchange” or “CBOE”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to expire CBOE Volatility Index (“VIX”) options every week. The proposed rule change was published for comment in the Federal Register on June 12, 2015.<sup>3</sup> The Commission received no comments on the proposed rule change. This order grants approval of the proposed rule change.

II. Description of the Proposed Rule Change

In February 2006, CBOE began trading options that expire monthly on the VIX, which measures a 30-day period of implied volatility. Currently, standard VIX options expire once a month. CBOE now proposes to expire 30-day VIX options every week. According to CBOE, VIX options would continue to trade as they do today and they would be subject to all of the same rules that they are subject to today, except as proposed to be modified by the proposed rule change.<sup>4</sup>

CBOE notes that, in its capacity as the Reporting Authority, it enhanced the VIX Index

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See Securities Exchange Act Release No. 75120 (June 8, 2015), 80 FR 33574 (“Notice”).

<sup>4</sup> See Notice, supra note 3, at 33574.

(cash/spot value) to include P.M.-settled S&P 500 Index End-of-Week expirations (“SPXWs”) in 2014.<sup>5</sup> According to CBOE, the inclusion of SPXWs allows the VIX Index to be calculated with SPX option series that most precisely match the 30-day target timeframe for expected volatility that the VIX Index is intended to represent. CBOE further states that using SPX options with more than 23 days and less than 37 days to expiration ensures that the VIX Index will always reflect an interpolation of two points along the S&P 500 Index volatility term structure.<sup>6</sup>

The last trading day for expiring standard VIX options is the business day immediately prior to their expiration date. The expiration date for VIX options is pegged to the standard (third Friday) SPX option expiration in the subsequent month. According to CBOE, the expiration date is on the Wednesday that is 30 days prior to the third Friday of the calendar month immediately following the month in which the VIX option expires.<sup>7</sup> CBOE (as the Reporting Authority for VIX options) calculates the exercise settlement value for expiring VIX options on their expiration date.<sup>8</sup>

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<sup>5</sup> See Notice, supra note 3, at 33574-75. CBOE notes that this enhancement did not impact the exercise settlement value for VIX options and futures, which continue to use the same VIX Index formula and the opening prices of standard (i.e., third Friday expiration) S&P 500 Index (“SPX”) option series with 30 days to expiration. See id. at 33575, n.5.

<sup>6</sup> See Notice, supra note 3, at 33574-75. See also the VIX White Paper available at <https://www.cboe.com/micro/vix/vixwhite.pdf> for a detailed description about the VIX Index methodology.

<sup>7</sup> See Notice, supra note 3, at 33575. If the Friday in the subsequent month is an Exchange holiday this standard Wednesday VIX option expiration is changed to be the business day that is thirty days prior to the Exchange business day immediately preceding that Friday. See id.

<sup>8</sup> See CBOE Rule 24.9(a)(5) (setting forth the method of determining the day on which the exercise settlement value will be calculated for VIX options and determining the expiration date and last trading day for VIX options). See also Notice, supra note 3, at 33575.

The Exchange now proposes to expire VIX options each Wednesday.<sup>9</sup> According to CBOE, the new VIX expirations would be series of the existing VIX option class. Similar to the CBOE Short-Term Volatility Index (“VXST”),<sup>10</sup> however, different types of SPX options would be used to calculate and settle VIX options. Specifically, CBOE states that, as today, the standard (monthly) VIX option expirations would be calculated using A.M.-settled SPX options that expire on the third Friday in the subsequent month and the period of implied volatility covered by these contracts would be exactly 30 days. The new weekly VIX option expirations would be calculated using P.M.-settled SPXWs that expire in 30 days and the period of implied volatility by these contracts would be 30 days, plus 390 minutes.<sup>11</sup>

In order to allow for the weekly expiration of 30-day VIX options, CBOE is also proposing to amend its rules relating to volatility index options in several ways. CBOE proposes to add new language relating to VIX options specifying that the exercise settlement value of a VIX option will be calculated on the specific date (usually a Wednesday) identified in the option symbol for the series. If that Wednesday or the Friday that is 30 days following that Wednesday

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<sup>9</sup> CBOE notes that it is currently unable to list weekly VIX options under its other weekly option programs because those programs require that weekly options expire on Fridays and VIX options expire on Wednesdays. See Notice, supra note 3 at 33575, n.8.

<sup>10</sup> CBOE introduced weekly expiring options on the VXST, which measures a nine-day implied volatility period, in 2014. See Securities Exchange Act Release No. 71764 (March 21, 2014), 79 FR 17212 (March 27, 2014) (SR-CBOE-2014-003) (Order Granting Approval of Proposed Rule Change to List and Trade CBOE Short-Term Volatility Index Options).

<sup>11</sup> P.M.-settled, expiring SPXWs stop trading at 3:00 p.m. (Chicago time) on their last day of trading. See Rule 24.9(e)(4). The additional 390 minutes reflects that these constituent options trade for six and a half hours on their expiration date until 3:00 p.m. (Chicago time).

is an Exchange holiday, the exercise settlement value shall be calculated on the business day immediately preceding that Wednesday.<sup>12</sup>

CBOE notes that expiring 30-day VIX options weekly would result in the Modified Opening Procedures being used more frequently for the constituent options series used to calculate the exercise settlement values for the proposed new 30-day VIX weekly expirations.<sup>13</sup>

The Exchange also proposes to add detailed information about the “time to expiration” input for VIX options volatility index options (including standard (monthly) and weekly VIX options) that will be used. Specifically, under the proposal, the “time to expiration” used to calculate the Special Opening Quotation will account for the actual number of days and minutes until expiration for the constituent options series.<sup>14</sup>

The Exchange also notes that it currently is permitted to list up to 12 standard (monthly) VIX expirations.<sup>15</sup> The Exchange proposes to retain the ability to list 12 standard (monthly) VIX expirations and proposes to permit the Exchange to list up to six weekly expirations in VIX options. According to the Exchange, the six weekly expirations would be for the nearest weekly expirations from the actual listing date and weekly expirations would not be permitted to expire in the same week in which standard (monthly) VIX options expire. Standard (monthly) expirations in VIX options would not be counted as part of the maximum six weekly expirations permitted for

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<sup>12</sup> See Notice, supra note 3, at 33575.

<sup>13</sup> See id.

<sup>14</sup> See id.

<sup>15</sup> The Exchange calculates the CBOE VVIX Index, which measures the expected volatility of the 30-day forward price of the VIX Index and is calculated using VIX options. Because CBOE calculates a volatility index using VIX options, the Exchange is permitted to list up to 12 expirations at any one time for VIX options. See Notice, supra note 3, at 33576, n.13.

VIX options.<sup>16</sup>

The Exchange notes that currently it may list new series in VIX options up to the fifth business day prior to expiration. The Exchange proposes to amend CBOE Rule 24.9 to permit new series to be added up to and including on the last day of trading for an expiring VIX option contract. The Exchange notes that this listing ability is similar to the series setting schedule for other types of weekly expirations, including VXST options.<sup>17</sup>

Finally, the Exchange proposes to break out VIX options separately from other volatility index options under new subparagraph (ii) to CBOE Rule 24.9.01(1) and to specify that the interval between strike prices for CBOE Volatility Index (VIX) options will be \$0.50 or greater where the strike price is less than \$75, \$1 or greater where the strike price is \$200 or less and \$5 or greater where the strike price is more than \$200.

The Exchange notes that the strike setting parameters set forth in the proposed paragraph are already permitted for VIX options.<sup>18</sup> The Exchange believes that separating VIX options from other volatility index options in this section to the CBOE Rulebook would benefit market participants since it would be easier to identify the strike setting parameters for VIX options by breaking them out as proposed.

The Exchange proposes several clarifying changes to the rule titles and various subheadings to reflect the substantive changes the Exchange is proposing. In addition, the

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<sup>16</sup> See Notice, supra note 3, at 33576 (providing a chart summarizing the maximum listing ability under the proposed rule change).

<sup>17</sup> See existing Rule 24.9.01(c). See also Rules 5.5(d)(4) and 24.9(a)(2)(A)(iv) which permit series to be added up to and including on their expiration date for short-term (weekly) options.

<sup>18</sup> See Rule 24.9(1) and Rule 24.9.12, which permits \$0.50 and \$1 strike price intervals for options that are used to calculate volatility indexes. The Exchange calculates the CBOE VVIX Index, which measures the expected volatility of the 30-day forward price of the VIX Index and is calculated using VIX options.

Exchange is proposing various clarifying non-substantive changes to ensure consistency and parallel structure among various Exchange rules.

CBOE represents that it has analyzed its capacity and represents that it believes the Exchange and the Options Price Reporting Authority (“OPRA”) have the necessary systems capacity to handle the additional traffic associated with the listing of new series that would result from the expiring VIX options weekly. CBOE further notes that because the proposal is limited to a single class, the Exchange believes that the additional traffic that would be generated from the introduction of weekly 30-Day VIX option series would be manageable.

### III. Discussion and Commission Findings

The Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.<sup>19</sup> Specifically, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,<sup>20</sup> which requires, among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to protect investors and the public interest. Specifically, the Commission believes that expiring VIX options weekly will provide investors with an additional trading and hedging mechanism and may provide investors with additional opportunities to manage 30-day volatility risk each week.

The Exchange has represented that it has many years of history and experience in conducting surveillance for volatility index options trading to draw from in order to detect

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<sup>19</sup> In approving this proposed rule change, the Commission has considered the proposed rule’s impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>20</sup> 15 U.S.C. 78f(b)(5).

manipulative trading in the proposed 30-day weekly VIX series.<sup>21</sup> In approving the proposed weekly expiring VIX options, the Commission has also relied on the Exchange's representation that it and OPRA have the necessary systems capacity to handle the additional traffic associated with the listing of new series that would result from the weekly expiration of VIX options.<sup>22</sup>

IV. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,<sup>23</sup> that the proposed rule change (SR-CBOE-2015-050) be, and hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>24</sup>

Robert W. Errett  
Deputy Secretary

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<sup>21</sup> See Notice, supra note 3, at 33577.

<sup>22</sup> See id.

<sup>23</sup> 15 U.S.C. 78s(b)(2).

<sup>24</sup> 17 CFR 200.30-3(a)(12).